ATTACHMENT "B"

INFORMATION TO SUPPORT DISCHARGE OF TREATED GROUNDWATER TO SURFACE WATER

This guidance document outlines the minimum information required by the California Regional Water Quality Control Board, Lahontan Region, prior to considering issuance of a Notice of Applicability (NOA) for general waste discharge requirements for the discharge of treated ground water to surface water. In addition to the information outlined in this document, a completed Notice of Intent (NOI-Attachment E) and filing fee must also be submitted.

Discharges to surface water regulated by the general Order include discharges to all bodies defined as surface waters in the Code of Federal Regulations, Section 122.2.

A. Background Information

A basic description of the proposed discharge must be provided to allow staff to determine if a general permit is applicable to the proposed discharge. This information generally includes:

1. Identification of the source of pollutants (source areas), the potential seasonal variations in the concentrations of pollutants and flow rates, and a general description of the proposed treatment and disposal systems.

2. Identification of the surface drainages controls, drainage courses and surface water bodies, including rivers, streams, lakes and ponds within one mile of the facility.

3. Property boundaries.

4. Buildings, dwellings, and other significant structures.

5. Map(s) of the site which depicts the locations of all surface features identified above, including the process and source areas, the points of discharge and the extraction, treatment and disposal facilities.

6. Documentation of compliance with all necessary local and state permits.

B. Chemical and Physical Wastewater Characteristics

A chemical and physical evaluation of the wastewater is needed to allow staff to assess the need for discharge standards and monitoring, and to evaluate the potential for impacts on water quality. The specifics of the characterization varies with the type of wastes being discharged. The following are minimum requirements for ground water cleanup discharges:

1. General Analyses

A minimum of one of each of the following analyses of the wastewater:

a. Chlorinated volatile hydrocarbons (EPA Method 8021 or equivalent).

b. Aromatic volatile hydrocarbons (EPA Method 8260 or equivalent).

c. Total petroleum hydrocarbons (TPH) in the gasoline and diesel ranges (EPA Method 8015 or equivalent). Additional or alternative TPH analyses may be required if the suspected pollutants contain hydrocarbon fractions outside the range of these tests.

d. General or standard minerals analyses, including but not limited to, total dissolved solid (TDS), chloride, sulfate, nitrate, electrical conductivity (EC), pH and temperature.

e. Other analyses associated with specific types of waste streams; for example, dissolved oxygen (DO) and suspended solids (SS).

2. California Toxics Rule Requirements

As part of a complete NOI submittal, include data sufficient to determine if any water quality-based effluent limitation is required in a discharge permit pursuant to the California Toxics Rule (CTR). The CTR data is needed to assess 126 priority pollutants. If CTR data is not available, please refer to the following Attachments for information on how to collect the CTR data:

Groundwater samples may be collected from the treatment system influent or effluent to comply with Attachment I-General Provisions for Monitoring and Reporting. A representative grab or composite sample of the upstream receiving water shall also be obtained if applicable. These samples shall be analyzed for all constituents listed in Attachment "D."

a. Attachment "D" – **Constituents to be monitored.** This list identifies the constituents to be monitored, the controlling water quality criteria, and suggested analytical procedures. It is organized into groupings (Inorganics, Volatile Organics, Semi-Volatile Organics, Pesticides/Polychlorinated Biphenyls (PCBs), Other Constituents, and Discharge & Receiving Water Flows). Minimum quantitation levels for the analysis of the listed constituents must be equal to or less than the Minimum Levels (ML) listed in Appendix 4 of the SIP or the Detection Limits for Reporting Purposes (DRLs) published by the Department of Health Services which are below the controlling water quality criteria concentrations listed in Attachment "D" of this letter. In cases where the controlling water quality criteria concentration are below the detection limits of all approved analytical methods, the best available procedure must be utilized that meets the lowest of the ML and DRL. You are not required to use these specified procedures as long as the procedure you select achieves the desired minimum detection level. All analyses must be performed by a California certified environmental analytical laboratory.

b. Attachment "E" – **Dioxin and furan sampling**. Section 3 of the SIP has specific requirements for collecting samples for analysis of dioxin and furan congeners. Briefly, for dischargers classified as minor, such as yourself, one sample from upstream in the receiving water and one sample from the treatment system discharge must be collected and analyzed.

c. Attachment "F" – **Reporting Requirements**. This attachment provides laboratory and reporting requirements including a recommended data reporting format.

C. Wastewater Treatment System

A description of the treatment facility is needed to assure that all waste streams are accounted for, and to aid in design of the monitoring program.

1. A detailed narrative description and schematic presentation of the proposed treatment system, including all processes.

2. Descriptions of the nature and concentration of any chemical additive used for treatment must be included. If the proposed treatment system uses activated carbon, submit an estimate of the breakthrough time for each carbon treatment unit. If the operations and maintenance included backflushing, or other required treatment for maintenance, then a full description of any discharges associated with these procedures must be included.

3. An estimate of the average, maximum and any variation in flows, as well as the design flows (hydraulic and treatment) for the treatment system. All necessary sizing calculations to accommodate the treatment volume must be included.

4. An operation plan describing general operations, maintenance procedures and process controls. Information on the provisions for stand-by power must be provided.

5. A description of the proposed performance-monitoring system utilized to determine that the treatment and disposal system is in compliance with NPDES Permit requirements.

6. A spill plan including the preventive and contingency measures for controlling accidental discharges and for minimizing the effect of such an event.

7. Information required to assess protection of the facility from floods and frost.

8. A narrative and schematic description of the proposed extraction system. A discussion of the number, location and pumping rates of the extraction wells.

D. Receiving Water

1. Provide information on the water quality of the receiving water. Analytical results should be provided for all constituents found in the waste stream as listed under B.1 and B. 2 above. Additional analysis may be requested by Board staff.

2. Descriptions of the direction and magnitude of flows. Sources and seasonal flow variations for surface water and irrigation supply must be provided.

3. Conduct an analysis of the impact of the wastewater discharge on the receiving water quality. Calculations should be performed for the range of dilution conditions expected to be found in the receiving waters. All assumptions should be stated and a sample calculation should be included, demonstrating requirements with receiving water quality objectives.